

Motorized Extended Guide Goniometer

Stage Size 60 × 60 mm

OSMS-60A

RoHS

CE

High precision motorized goniometers with integrated bearing ways for superior stiffness, accuracy and durability.

Their smooth motion makes them ideal for frequent angle adjustment.



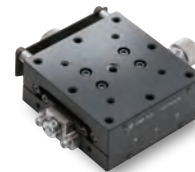
- Extended Contact bearing ways are machined directly into the main body reduce the number of parts and assembly time, making these very durable and cost effective.
- Attachment pins (accessories) are ideal for positioning when assembling into $\alpha\beta$ axis or mounting on various instruments or devices.

Guide

- ▶ Contact our Sales Division if you desire to assemble into an $\alpha\beta$ axis stage.
- ▶ Manual type (GOHT-60) is also available.

Reference E178

WEB Reference Catalog Code W7093



GOHT-60A***

Specifications

Part Number		OSMS-60A60	OSMS-60A85	OSMS-60A105
(Opposite Model)		OSMS-60A60R	OSMS-60A85R	OSMS-60A105R
Mechanical Specifications	Travel [°]	±14	±9	±7
	Stage Size [mm]	60×60	60×60	60×60
	Travel Mechanism (reduction ratio)	Worm gear (1: 246)	Worm gear (1: 314)	Worm gear (1: 380)
	Positioning Slide	Extended Contact Ball Guide	Extended Contact Ball Guide	Extended Contact Ball Guide
	Stage Material	SUS440C quench hardened	SUS440C quench hardened	SUS440C quench hardened
	Finish	Super black chrome	Super black chrome	Super black chrome
	Weight [kg]	0.85	0.75	0.75
Size Tolerance	Stage Height [mm]	25	20	20
	Rotation Center Height [mm]	60±0.1	85±0.1	105±0.1
	Rotation Center Deflection Accuracy [mm]	Within ϕ 0.01	Within ϕ 0.01	Within ϕ 0.01
Accuracy Specifications	Resolution	(Full) [°/pulse]	about 0.00293	about 0.00229
		(Half) [°/pulse]	about 0.00146	about 0.00115
	MAX Speed [°/sec]	10	8	6.6
	Positional Repeatability [°]	±0.004	±0.004	±0.004
	Load Capacity [N]	29.4 (3.0kgf)	29.4 (3.0kgf)	29.4 (3.0kgf)
	Moment Stiffness [°/N·cm]	Roll 0.3 Yaw 0.3	Roll 0.3 Yaw 0.3	Roll 0.3 Yaw 0.3
Sensor	Lost Motion [°]	0.02	0.02	0.02
	Sensor Part Number	Micro photo sensor: GP1S097HCZ0F(Sharp Corporation): Limit Sensor, Origin Sensor		
	Limit Sensor	Equipped (NORMAL CLOSE)	Equipped (NORMAL CLOSE)	Equipped (NORMAL CLOSE)
	Origin Sensor	Equipped (NORMAL OPEN)	Equipped (NORMAL OPEN)	Equipped (NORMAL OPEN)

Motor / Sensor Specifications

Motor	Type	5-phase stepping motor 0.75A/phase (Oriental Motor Co., Ltd.)
	Motor Part Number	PK523HPB-C12 (□28mm)
	Step Angle	0.72°
Sensor	Power Voltage	DC5 ~ 24V±10%
	Current Consumption	60mA or lower (20mA per sensor)
	Control Output	NPN open collector output DC30V or lower, 50mA or lower
	Output Logic	When shaded: Output transistor OFF (no conduction): Limit sensor When shaded: Output transistor ON (conduction): Origin sensor

Compatible Driver / Controller

Control System	Compatible Driver	SG-5M, SG-5MA, MC-S0514ZU, SG-514MSC, MC-7514PCL
	Compatible Controller	GSC-01, GSC-02, SHOT-702, GIP-101, HSC-103, SHOT-302GS, SHOT-304GS, HIT-M·HIT-S, PGC-04-U

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40 × 40 mm

60 × 60 mm

80 × 80 mm

85 × 85 mm

100 × 100 mm

120 × 120 mm

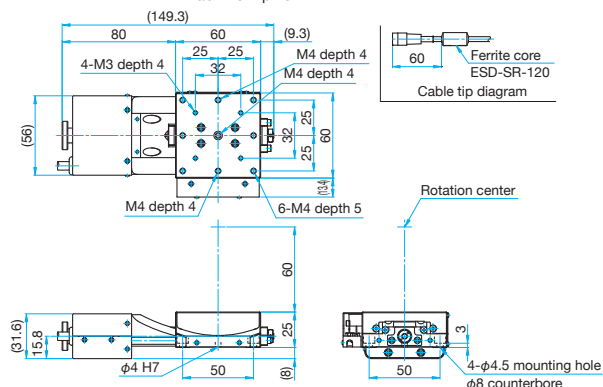
Others



Outline Drawing

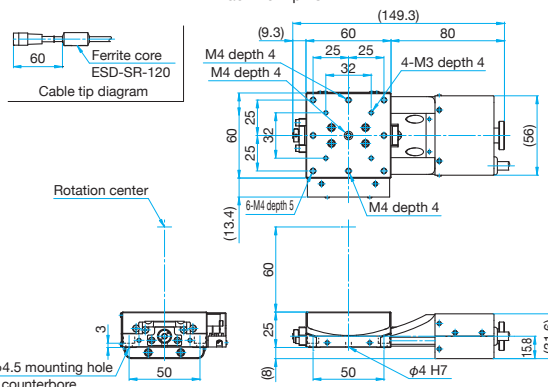
OSMS-60A60

Hexagon socket head cap screw M4×8...4 screws, Attachment pins



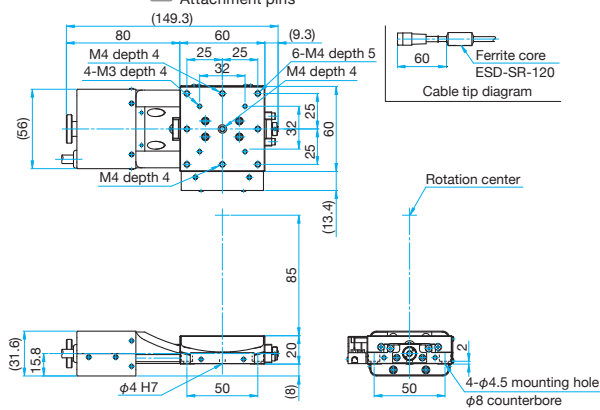
OSMS-60A60R

Hexagon socket head cap screw M4×8...4 screws, Attachment pins



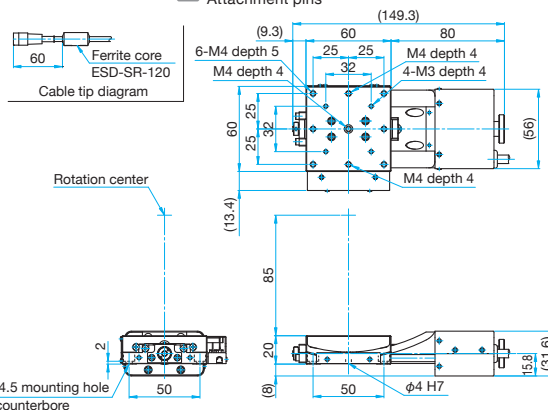
OSMS-60A85

Hexagon socket head cap screw M4×8...4 screws, Attachment pins



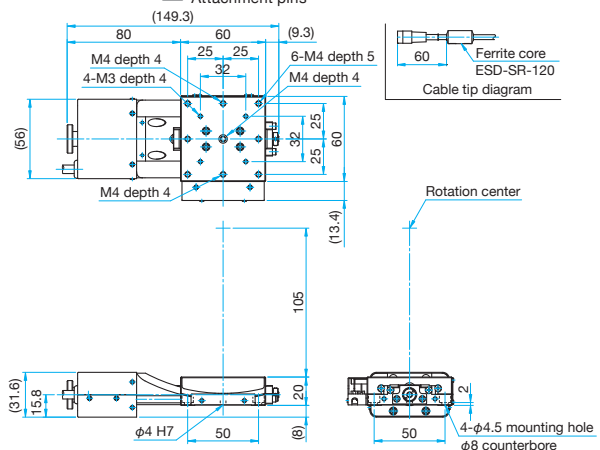
OSMS-60A85R

Hexagon socket head cap screw M4×8...4 screws, Attachment pins



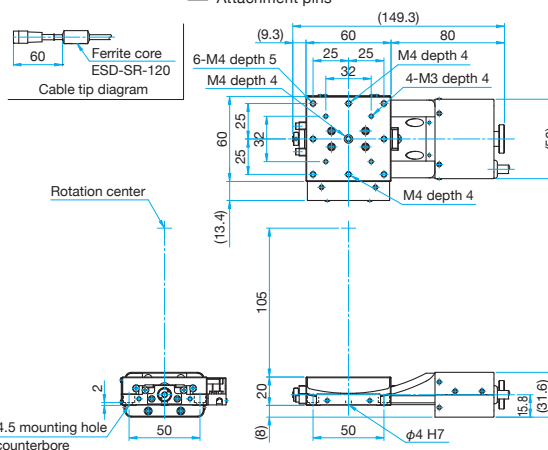
OSMS-60A105

Hexagon socket head cap screw M4×8...4 screws, Attachment pins

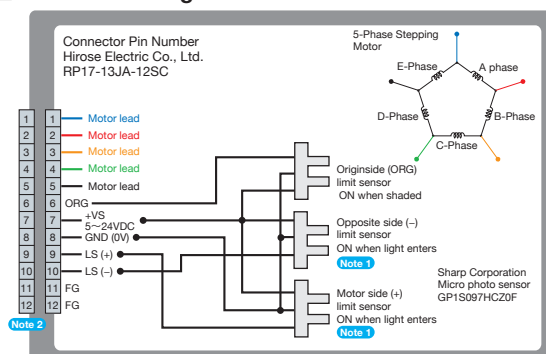


OSMS-60A105R

Hexagon socket head cap screw M4×8...4 screws, Attachment pins



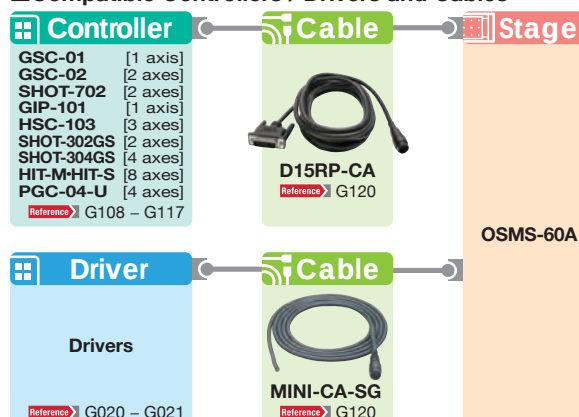
Connection Diagram



Note 1 The motor side limit sensor is the + direction limit sensor. Motorized stages are not fitted with proximity origin sensors.

Note 2 Compatible cable connector: Hirose Electric Co., Ltd. RP17-13PA-12PC/RP17-PC-122

Compatible Controllers / Drivers and Cables



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